

VILKIN, V. I., et al.

Technology

New aspect of highspeed milling in the Kirovsk plant. Lenizdat, 1951.

Monthly List of Russian Accessions. Library of Congress October 1952. Unclassified.

VILENKIN, V. I., et al.

Technology

New aspect of highspeed milling in the Kirovsk plant. Opyt kompleksnoi brigady tvorcheskogo sodruzhestva. (Novatory proyzvodstva v bor'be za tekhnicheskiy protsess). Lenizdat, 1951.

Monthly List of Russian Accessions, Library of Congress October 1952. Unclassified.

3/730/60/000/000/002/000
A004/A127

AUTHOR: Vilenskaya, Ye. L.

TITLE: Making tools from plasticized blanks

SOURCE: Novoye v instrumental'nom proizvodstve, Comp. by I. G. Kosmachev.
(Leningrad) Lenizdat, 1960, 73 - 87

TEXT: The article deals with the production of sintered carbide tools from plasticized blanks. The essential feature of this new method, which was developed by the Vsesoyuznyy nauchno-issledovatel'skiy institut tverdykh splavov (VNIITS) (All-Union Scientific Research Institute of Sintered Carbides) consists in the fact that the blanks are made from a fine-grained mixture which is produced under special conditions, while their workability is ensured by the addition of a plasticizer (generally paraffin). These blanks are subjected to mechanical working and subsequent sintering. The special methods of producing the mixtures and adding the plasticizer impart such properties to the blanks that make them superior to ordinary pressed blanks or blanks pressed with other plasticizers. The author presents a detailed description of the production of

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Making tools from plasticized blanks

S/730/60/000/000/002/003
A004/A127

these blanks, their workability and machinability, their cutting conditions and sintering, and enumerates the various fields of application of the blanks, in particular in the making of various cutting tools, stamps and dies, the manufacture of which is described in detail. There are 9 figures and 1 table.

Card 2/2

VEER
SHEPTEL'GLYAS, A.S.; VILMSKIY, A.P.

The DPM dynamograph for testing agricultural machinery. Izv.tekh.
no.5:62-63 S-0 '56. (MLRA 10:2)

(Dynamometer)

VALOV, P.M.; SOKOLOVA, V.K.; VILENSKIY, A.G.; VAYNSHTEYN, E.Ye.

Unit for measuring Mössbauer spectra. Prib. i tekhn. eksp. 10
no.5:161-163 S-O '65. (MIRA 19:1)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR,
Novosibirsk. Submitted August 22, 1964.

VILENSKIY, A.N.; KAVARDIN, G.I.; KRAVTSOVA, L.I.; STARITSINA, G.B.;
KAZAKOV, A.N., red.

[Petrology of trap intrusions on the right bank of the
lower reaches of the Yenisey River] Petrologiya trappo-
vykh intruzii pravoberezh'ia nizhnego techeniya Eniseia.
Moskva, Nauka, 1964. 236 p. (MIRA 17:9)

VILENSKIY, A.M.

Regional metamorphism and its facies in the central part of
the Sultan Uisdag Range [with summary in English]. Vest.LGU
13 no.18:77-87 '58. (MIRA 12:1)
(Sultan Uisdag Range--Geology, Structural)

VILENSKIY, A.M.; KAVARDIN, G.I.; KRAVTSOVA, L.I.; STARITSYNA, G.N.

Recent data on ore-bearing trap intrusions of the Siberian Platform. Dokl. AN SSSR 148 no.1:183-186 Ja '63. (MIRA 16:2)

1. Nauchno-issledovatel'skiy institut geologii Arktiki. Predstavleno akademikom D.S. Korzhinskim.
(Siberian Platform--Ore deposits)

VILENSKIY, A.M.; KAVARIN, G.I.; KPAVTSOVA, L.I.; STARITSYNA, G.N.

Petrology of trap intrusions. Zap. Vses. min. ob-va 92 no.6;
674-683 '63. (MIRA 18:3)

1. Nauchno-issledovatel'skiy institut geologii Arktiki, Leningrad.

VILENSKIY, A. M.: Master Geolog-Mineralog Sci (diss) -- "The *geology* and petrography of the central portion of the Sultamizdag range". Moscow, 1959.

20 pp (Moscow State U im M. V. Lomonosov), 100 copies (KL, No 17, 1959, 106)

VILENSKIY, A.M.; KRAVTSOVA, L.I.

Structure of certain trappean intrusions in the northwestern
part of the Siberian Platform. Inform. biul. NIIGA no.17:5-12
'59.

(MIRA 13:11)

(Siberian Platform--Geology, Structural)

VILENSKIY, A.M.

Formation of perthites. Zap.Uz.etd.Vses.min.ob-va no.6:97-108
'54. (MLRA 9:12)

1. Sredneaziatskaya geologicheskaya ekspeditsiya.
(Perthites)

VILENSKIY, A.M.; GOLUBKOV, V.S.

Structure and tectonic control of some nickel-bearing
intrusives in the Kureyka Basin. Trudy NIIGA 123:158-165 '61.
(MIRA 14:10)

(Kureyka Valley; —Nickel)

ZINGER, A.M., inzh.; VILENSKIY, A.N., inzh.; LESHCHINSKIY, M.Yu., inzh.

Device for determining the waterproofness of concrete. Gidr. stroi.
32 no.8:45-46 Ag '62. (MIRA 15:9)
(Concrete—Testing)

BORTFEL'D, Serafima Aleksandrovna; GOLOVINSKAYA, Nadezhda Vasil'yevna;
VILENSKIY, B.S., red.; BUGROVA, T.I., tekhn.red.

[Medical gymnastics in the restorative period of poliomyelitis
in children] Lechebnaya gimnastika v vosstanovitel'nom periode
poliomiellita u detei. Leningrad, Medgiz, 1962. 63 p. (MIRA 16:6)
(POLIOMYELITIS) (EXERCISE THERAPY)

DAVIDENKOV, Sergey Nikolayevich[deceased]; VILENSKIY, B.S., red.;
LEBEDEVA, Z.V., tekhn. red.

[Neuroses] Nevrozy. Leningrad, Medgiz, 1963. 269 p.
(MIRA 16:4)
(NEUROSES)

ANOSOV, Nikolay Nikolayevich; VILENSKIY, Boris Sergeyevich; ABRAKOV,
L.V., red.; KHARASH, G.A., tekhn. red.

[Ischemic insultus; thrombosis of the cerebral vessels]
Ishemicheskii insult; tromboz sosudov golovnogo mozga.
Leningrad, Medgiz, 1963. 286 p. (MIRA 16:11)
(CEREBROVASCULAR DISEASE) (THROMBOSIS)

PROCESSED AND PROPERTIES INDEX																									
1ST AND 2ND ORDER													3RD AND 4TH ORDER												
<p>2A</p> <p>Vitamin C and parodontitis. B. I. Vilenskii. <i>Stomatologiya</i> 1940, No. 3, 30-42. --In particular there is observed a low vitamin C level in the organism, particularly in cases of inflammatory processes of the gums. Elimination of vitamin C deficiency leads to cessation of gingivitis, bleeding, and tooth mobility. However, vitamin C deficiency is not the etiological factor, but rather merely a complementing one. G. M. Korodapoff</p> <p>11E</p>																									
<p>ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																									
<p>1ST ORDER 2ND ORDER 3RD ORDER 4TH ORDER</p>																									

VILENSKIY, B.

City planning and improvement of outdoor public facilities. Na
stroi. Ros. no.8:24-25 Ag '61. (MIRA 14:9)

1. Glavnyy arkhitektorskiy Institut vneshnego blagoustroystva i
ozeleneniya Glavnogo arkhitekturno-planirovochnogo upravleniya
Moskvy.

(Moscow--Parks)

VILENSKIY, B.A.; BELYAVTSEV, N.N.

Semiautomatic machine for cutting off parts produced by investment casting. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i tekhn. inform. 18 no.9:13-14 S '65. (MIRA 18:10)

22(1)

SOV/3-59-3-43/48

AUTHOR: Vilenskiy, B.F., Member of the KPSS (since 1918)

TITLE: The Student Organization Attached to the Petrograd Committee of the RSDRP(b) (Studencheskaya organizatsiya pri Petrogradskom komitete RSDRP(b))

PERIODICAL: Vestnik vysshey shkoly, 1959, Nr 3, pp 82 - 85 (USSR)

ABSTRACT: The author describes the propaganda activity of a small group of students which had organized itself with the Central Committee of the Russian Social Democratic Labor Party (Bolsheviki) in March 1917, and assisted the Bolsheviks in their revolutionary work. There are 5 Soviet references.

Card 1/1

VILENSKIY, B.S.

Prolonged use of anticoagulants in the clinic for nervous diseases.
Zhur.nevr.i psikh. 61 no.10:1482-1488 '61. (MIRA 15:11)
(ANTICOAGULANTS (MEDICINE)) (NEUROLOGY)

VILENSKIY, Boris Sergeyevich, kand.med.nauk; ABRAMOV, L.V., red.;
GOLYAYEVA, T.S., tekhn.red.

[Radiculitis; treatment and prevention] Radikulit. Lechenie
i preduprezhdenie; populiarnyi ocherk. Leningrad, Gos.izd-vo
med.lit-ry, Leningr.otd-nie, 1958. 31 p. (MIRA 13:7)
(NERVES, SPINAL--DISEASES)

ANOSOV, Nikolay Nikolayevich; VILENSKIY, Boris Sergeyevich

[Treatment and prevention of thrombosis of the cerebral vessels
with anticoagulants] Lechenie i preduprezhdenie trombozov
sosudov golovnogogo mozga antikoagulantami. Leningrad, Medgiz,
1959. 111 p. (MIRA 13:4)
(BRAIN--DISEASES) (ANTICOAGULANTS (MEDICINE))

SOV-4-58-7-10/22

AUTHORS: Tyulyayev, D.V., Shenker, L.M., Vilenskiy, B.S. , Architects
TITLE: Brussels - 1958 (Bryussel', 1958)
PERIODICAL: Znaniye - sila, 1958, Nr 7, pp 19-21 (USSR)
ABSTRACT: In this article, the authors, architects of the Soviet pavilion at the Brussels Fair, describe their impressions of the exposition. There are 18 photographs and 12 sketches.

Card 1/1

ANOSOV, N.N.; VILENSKIY, B.S.

Controversial problems in treating cerebral thrombosis with anti-coagulants, [with summary in French]. Zhur.nevr. i psikh. 59 no.2: 194-202 '59. (MIRA 12:4)

(CEREBRAL EMBOLISM AND THROMBOSIS, therapy,
anticoagulants (Rus))

(ANTICOAGULANTS, ther. use,
cerebral thrombosis (Rus))

KOZYREV, Valentin Arkhivovich; VISHENSKIY, B.S., red.

[Care of patients with lesions of the brain and spinal
cord] Ukhod za bol'nymi s porazheniyami golovnogo i
spinnogo mozga. Leningrad, Meditsina, 1964. 166 p.
(NIA 12:1)

TYULYAYEV, D.V., arkhitektor; SHENKIN, L.M., arkhitektor; VILENSKIY, B.S.,
arkhitektor

Brussels - 1958. Znan. sila 33 no.7:19-20 Jy '58. (MIRA 11:11)
(Brussels--Exhibitions)

ANOSOV, N.N., dots., VILENSKIY, B.S., kand.med.nauk (Leningrad)

Current aspects of the use of anticoagulants in neuropathology.

Klin.med.36 no.9:50-56 S'58

(MIRA 11:10)

(CEREBRAL EMBOLISM AND THROMBOSIS, ther.

anticoagulants (Rus))

(ANTICOAGULANTS, ther. use

cerebral embolism & thrombosis (Rus))

KUL'KOVA-DAVIDENKOVA, E.F.; VILENSKIY, B.S.

Results of proserine therapy of diseases of the nervous system.
Nevropat.psikhiat., Moskva 20 no.1:64-67 Jan-Feb 51. (GLML 20:6)

1. Of the Clinic for Nervous Diseases (Director--S.N.Davidenkov,
Active Member of the Academy of Medical Sciences), Leningrad State
Institute for the Advanced Training of Physicians.

GEKKEL', Lyudmila Borisovna; VILENSKIY, B.S., redaktor; RULEVA, M.S.,
tekhnicheskiiy redaktor

[The pathophysiological mechanism and clinical aspects of the
obsession syndrome] Patofiziologicheskii mekhanizm i klinika sindroma
naviazchivosti. [Leningrad] Gos. izd-vo med. lit-ry, Leningradskoe
otd-nie, 1956. 80 p. (MLRA 9:10)
(FIXED IDEAS)

VILENSKIY, B.S.

EXCERPTA MEDICA Sec.12 Vol.11/8 Ophthalmology Aug57

1341. VILENSKIY B.C. *Local neurological disturbances and changes in the optic nerve, accompanying angioneurotic conditions (Quincke's oedema) (Russian text) Z.NEVROPAT. PSIKHIAT. (Mosk.) 1956, 56/7 (536-539)

Two patients are described. In cases of Quincke's oedema neurologists and ophthalmologists must take into account the possibility of disturbances of the optic nerve. Repeated Quincke's oedemas may cause serious and irreversible changes in the optic nerve.

Hadlirk - Brno (VIII, 12)

VILENSKIY, DMITRIY GERMOGENOVICH

DECEASED

1962
~~1961~~

c1961

See ILC

GEOPHYSICS/SOIL SCIENCES

VILENSKIY, D.N.

Physical culture therapy in diseases of the peripheral vessels of the type of thromboangiitis obliterans. Vop.kur.fizioter. i lech. fiz.kul'5. 21 no.1:51-54 Ja-Mr '56. (MLRA 9:9)

1. Iz otdeleniya fizioterapii i lechebnoy fizicheskoy kul'tury Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo insituta imeni M.F.Vladimirovskogo.

(EXERCISE THERAPY) (BLOW VESSELS--DISEASES)

VILENSKIY, D.N.

Clinical variants of the effect of narcotics in a protracted
attack of stenocardia. Sov. med. 27 no.12:79-81 D'63
(MIRA 17:4)

1. Iz Moskovskoy gorodskoy klinicheskoy bol'nitsy No.33 imeni
A.A. Ostroumova (glavnyy vrach P.V. Abashkina, nauchnyy ruko-
voditel' - prof. D.F. Presnyakov).

VILENSKIY, F.E., inzh.; SHCHELOKOV, Ya.M., inzh.

Effect of the soiling of screen heating surfaces on the operation of
boilers. Elek. sta. 36 no.6:85-86 Jo '65. (MIRA 18:7)

VOYTSITSKIY, S.F., inzh.; VILENSKIY, E.E., inzh.

Prevention of slag formation in shaft mill furnaces with ejection
port holes. Elek. sta. 33 no.4:77-78 Ap '62. (MIRA 15:7)
(Furnaces)

VILENSKIY, Ezra Samoilovich.

Sixteen days at the North Pole. Moskva, Izd-vo detskoi lit-ry, 1938. 128 p. (51-47728)

1. Ekspeditsiia SSSR na Severnyi polius, 1937. 2. North Pole.

VILENSKIY, F.P.

Investigating the most efficient distribution of settlement joints in and the strength of continuous foundations on non-uniformly thawing soils. Osn., fund. i mekh.grun. no.6: 9-11 '59. (MIRA 13:4)

(Foundations) (Frozen ground)

VILENSKIY, F.P.

Determination of the deflection angles of a footing situated
on an unevenly melting foundation. Osn., fund.i mekh.grun.
4 no.2:19-20 '62. (MIRA 15:8)
(Frozen ground) (Foundations)

VILNISKIY, F.P., inzh.

Planning foundations for buildings on irregularly thawing frozen
ground. Stroilprom. 36 no.4:14-17 Ap '58. (MIRA 11:4)
(Foundations) (Frozen ground)

VILENSKIY, F.P., Cand Tech Sci -- (diss) "Certain peculiarities
of layout
~~in the design~~ of building foundations ~~of the~~ gold industry /

in ~~the~~ regions of the southern Transbaykal." Mos, 1959,
10 pp with diagrams (Acad Sci USSR. Inst of *Permafrost Studies*
~~Frozen State Science~~
in V.A. Obruchev) 150 copies (KL, 28-59, 126)

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VILENSKIY, F.P., inzh.

Methods for constructing buildings and structures in frozen ground areas. *Biul. stroi. tekhn.* 15 no.3:12-15 Mr '58. (MIRA 11:3)

1. Institut merzlotovedeniya AN SSSR.
(Frozen ground) (Foundations)

LIPIS, V.B.; VILENSKIY, G.V.

Investigating the propulsive and manoeuvring qualities of the "Volgoles"
lumber carrier. Inform. sbor. TSNIIMF no.75 Tekh. ekspl. mor. flota
no.14:34-48 '62. (MIRA 16:3)
(Ship trials) (Ship propulsion)

VILENSKIY, I.YI.

U S S R .

538.566.3 : 621.396.11

7586. Effects of nonlinear properties of the ionosphere on radiowaves. I. M. VILENSKIY. Dokl. Akad. Nauk SSSR, 92, No. 3, 523-8 (1953) In Russian. English translation, U.S. National Sci. Found. NSF-tr-200.

A mathematical treatment of the effects of the perturbation of a nonlinear ionosphere by strong radiowaves on the waves themselves. The changes in amplitude and phase of the original wave can be considerable, and, in the case of an amplitude-modulated wave, there is also a change in modulation depth and the appearance of higher harmonics of the modulation frequency.

G. M. BROWN

VILENSKIY, I. M.
USSR/Physics Radiowaves in the ionosphere

FD 404

Card 1/1

Author : Vilenskiy, I. M.

Title : Influence of the Earth's magnetic field on the interaction of radio-waves in the ionosphere

Periodical : Zhur. eksp. i teor. fiz. 26, 42-56, Jan 1954

Abstract : Treats the interaction of radiowaves in the ionosphere taking into account the influence of the terrestrial magnetic field. An extension of the author's earlier work, which did not consider such influence (ZhETF, 22 544, 1952). Also considers the influence of cross modulation close to the gyromagnetic frequency. Thanks Prof V. L. Ginzburg for his interest and advice. Ten references.

Institution : Physicotechnical Institute of Gorkiy University

Submitted : May 30, 1952

VILKIN, L. M.

Dissertation: "Theory of Nonlinear Processes Occurring During Propagation of Radiowaves in the Ionosphere." Cand Phys-Math Sci, Gor'kiy Physicotechnical Res Inst, Moscow, 1954. (Referativnyy Zhurnal-Fizika, Moscow, Jun 54)

SO: SUM 318, 23 Dec 1954

VILENSKIY, I. M.

Phys. Tech. Inst., Gor'kiy State U.

Mathematical Reviews
May 1954
Mathematical Physics

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✓ Vilenskii, I. M. On the theory of interaction of radio waves in the ionosphere. Akad. Nauk SSSR. Zhurnal Eksper. Teoret. Fiz. 22, 544-561 (1952). (Russian)

A radio station may produce a field sufficiently strong to affect the velocity of the charged particles in a portion of the ionosphere. This change in velocity changes the frequency of collisions between the charged particles and therefore, by the magneto-ionic theory, changes the absorptive properties of the ionosphere. If the signal from a second station passes through this disturbed portion of the ionosphere, it will receive any modulation present in the signal of the original station. This effect has been observed and is called the Luxembourg effect. Starting with some expressions from kinetic theory for the electron velocity distributions, the author uses physical arguments and an iteration method to obtain estimates of the magnitude of this cross-modulation. If ω_1 is the frequency of the original station, ω_2 the frequency of the second station, then the modulation of the original station will be received on the frequency ω_1 and also on the side-bands of frequency $\omega_1 + 2\omega_2$ and $\omega_1 - 2\omega_2$. The author also gives estimates of the magnitude of these latter effects.

B. Friedman (New York, N. Y.).

10/5/54 IM

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SOV/141-2-4-2/19

AUTHORS: Vilenskiy, I.M. and Zykova, N.A.

TITLE: On the Distortion of Radio Waves¹ During Their Propagation² Through the Ionosphere

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika, 1959, Vol 2, Nr 4, pp 543 - 552 (USSR)

ABSTRACT: Vilenskiy has discussed the propagation of radio waves in the ionosphere (Ref 1) and showed that if the wave is amplitude-modulated at a frequency Ω then the non-linearity of the ionosphere leads to an increase (compared with the linear case) in the absorption coefficient for the wave, to the appearance of phase modulation and various other effects. The calculations were carried out as follows. Using the kinetic equations, the current set up in the ionosphere by the radio wave was calculated and the expression thus obtained was substituted into the wave equation. Both the kinetic equation and the wave equation were solved by successive approximations. The non-linearity was allowed for on a first-approximation basis. Only collisions of electrons with neutral molecules were taken into account, since

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On the Distortion of Radio Waves During Their Propagation Through
the Ionosphere

it was shown in Refs 2 and 3 that non-linear effects associated with electron-electron and electron-ion collisions can be neglected. In the present paper, the method adopted is as follows. Using the elementary kinetic theory, the current due to the action of the radio wave is calculated and then, as in Ref 1, and to the same approximation, a solution is obtained for the wave equation. For simplicity, the normal incidence of a wave on a uniform layer is considered and the non-linearity is taken into account to a first approximation only. The magnetic field due to the Earth is neglected. The incident wave is taken to be of the form Eq (1), where ω is the carrier angular frequency, Ω is the modulation frequency and M is the percentage modulation. Under the action of this wave, a change takes place in the average collision frequency between electrons and molecules. This is estimated with the aid of Eq (2), in which δ is the mean relative fraction of the kinetic

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On the Distortion of Radio Waves During Their Propagation Through the Ionosphere

energy of an electron lost during a collision with a molecule, ν is the effective collision frequency and \vec{v} is the electron velocity. The latter is determined from Eq (3). It is assumed that δ is independent of ν . The effective collision frequency is given by Eqs (4-7), where ν_0 is the value of the effective collision frequency at $E = 0$. Then, using the well-known formulae for the conductivity and dielectric constant given by Eqs (8) and (9), a discussion is given of the expression (taken from Ref 2) for the current density in the ionosphere which is given by Eqs (10) and (11). In the case of normal incidence and in the absence of the Earth's magnetic field, the wave equation is of the form given by Eq (12), where E_{10} and j are the projections of the vectors \underline{E}_{10} and \underline{j} onto the x or y axis. Substituting for j from Eq (10) into Eq (12), one obtains

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Eq (13), which is solved by the method of successive approximations, using the substitutions given by Eq (14) and neglecting powers of $E_{10}^{(1)}$ and $\zeta^{(1)}$ higher than unity and their products, The required solution which satisfies the boundary conditions given by Eq (15) is of the form given by Eq (16). Using Eqs (4), (5), (6), (11) and (16), the field at the point of reception is found to be of the form given by Eq (18), where the subsidiary quantities involved are defined by Eqs (18a) and (19). An expression for M_3 is not given. The phase changes involved are characterized by the quantities α , β_Ω and $\beta_{2\Omega}$ which are given by Eq (20). These general formulae have been used to calculate ΔM_Ω as a function of the distance between the transmitter and the receiver, the modulation frequency Ω and the carrier frequency ω . The calculations were carried out for the following model

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On the Distortion of Radio Waves During Their Propagation Through the Ionosphere

of the lower part of the night E-layer of the ionosphere. The layer begins at 80 km, the electron concentration obeys the law $N = N_0 + cz_1$ where $N_0 = 50$ electrons/cm² and is the electron concentration at an altitude of 80-90 km, c is a constant which is equal to 9.2×10^{-4} electrons/cm⁻⁴, z_1 is the altitude measured from the level at 90 km and the number of collisions follows an exponential law with altitude, i.e. $\nu_0 = \nu'_0 \exp(-z/h)$ where $\nu'_0 = 3.4 \times 10^6$ and is the collision frequency at an altitude 80 km. The results obtained are shown in Figures 2, 3 and 4. These results show some similarity with the experimental results obtained by King (Ref 9). However, the results of Cutolo (Ref 10) are in disagreement with the present theory. There are 4 figures and 11 references, 6 of which are Soviet, 4 English and 1 Italian.

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SOV/141-2-4-2/19

On the Distortion of Radio Waves During Their Propagation Through
the Ionosphere

ASSOCIATION: Novosibirskiy elektrotekhnicheskiy institut svyazi
(Novosibirsk Institute of Telecommunications)

SUBMITTED: November 29, 1958.
After revision: April 27, 1959

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9.9100

82447

S/141/60/003/03/002/014

AUTHORS: Vilenskiy, I.M., Chernyshov, V.P. and Sheynman, D.I.

E192/E382

TITLE: Distortion¹ of the Modulation of High-power Radio Waves²
During the Propagation³ in the Ionosphere (Experimental
Investigation). Part I.

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika,
1960, Vol. 3, No. 3, pp. 367 - 374

TEXT: An investigation of the change of the modulation depth of an amplitude-modulated wave at the carrier frequency of 200 kc/s was carried out by J.W. King (Ref 6). It is considered, however, that the results obtained by J.W. King are not fully satisfactory since they cannot be used in studying the dependence of the amplitude distortion on distance. Consequently, a more detailed study of the problem was undertaken. The measurements of the modulation depth were carried out simultaneously at three different points by means of three specially prepared measurement sets. One of the sets was situated in the vicinity of the transmitter and measured the modulation depth produced by the transmitter; the second was situated at a distance of 2 000 km (point 4) while the third set could be situated at various distances from the transmitter

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E192/E382

Distortion of the Modulation of High-Power Radio Waves During
the Propagation in the Ionosphere (Experimental Investigation).
Part I.

(points 1,2,3). Since the antenna system of the transmitter produced practically no vertical radiation component, it could be assumed that the receiver situated in the vicinity of the transmitter received only the surface wave whose modulation depth was the same as that of the transmitter. In order to secure the measurement of the modulation changes with an error of 0.5% it is necessary to employ the measuring sets of very high stability. The measurement of the carrier level was performed by means of a linear voltmeter employing a copper oxide rectifier. The voltage obtained at the output of the rectifier circuit was applied to a 2-stage low-frequency amplifier, fitted with RC filters. These bandpass filters were tuned to frequencies of 40, 80, 160 and 600 cps. The output of the amplifier was fed to a peak voltmeter which was measuring the magnitude of the envelope of the investigated signal. The modulation depth was determined by comparing the readings of the linear and the peak voltmeters. The experimental investigation of the

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Distortion of the Modulation of High-power Radio Waves During the Propagation in the Ionosphere (Experimental Investigation).
Part I.

amplitude distortion due to the propagation of the waves in the ionosphere was conducted during the period from April 24, 1959 to June 18, 1959. A powerful radio station operating at the frequency of 236 kc/s was employed as the transmitter, the modulation frequencies being 80, 160 and 600 cps. The modulation depth was approximately 80%. During the above period 30 observations were effected at night-time, the duration of each being 15 minutes (5 minutes for each audio frequency). All the 30 transmissions were received at the distance $L = 2100$ km (point 4). Ten transmissions were observed at the distances of 400, 700 and 1500 km from the receiver. The experimental results are given in Tables 1, 2, 3 and 4 and in Figures 1, 2 and 3. Tables 1, 2 and 3 shows the average relative values of the modulation changes. From the tables it is seen that while the modulation changes for any one observation did not exceed 2%, the differences between various observations are quite considerable. Table 4 shows the average relative values

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S/141/60/003/03/002/014

Distortion of the Modulation of ^{E192/E382}High-power Radio Waves During the Propagation in the Ionosphere (Experimental Investigation).
Part I.

of the modulation change for all the observation points. It is seen that the distortion at points 1 and 2 was as high as 17%. The dependence of the modulation distortion on frequency is illustrated in Fig. 1, while Fig. 2 shows its dependence on distance. The nonlinear dependence of the magnitude of the distortion on the power of the transmitter is illustrated in Fig. 3. The authors express their gratitude to G.S. Kharitonov, S.I. Volosnikov, B.I. Podlipalin, L.N. Ruchkan and V.P. Khoroshilov for their help in the preparation of the measuring equipment. There are 4 tables, 3 figures and 6 references: 3 English and 3 Soviet.

ASSOCIATION: Novosibirskiy elektrotekhnicheskiy institut svyazi
(Novosibirsk Electrotechnical Communication Institute)

SUBMITTED: December 14, 1959

Card 4/4

3921.3
S/141/62/005/002/003/025
E032/E514

9.9/00

AUTHOR: Vilenskiy, I.M.

TITLE: On the distortion of the modulation of high intensity radio-waves during their propagation through the ionosphere (experimental studies). II

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika, v.5, no.2, 1962, 221-233

TEXT: The authors report measurements with a "medium-power" transmitter at $\lambda = 1500$ m. Previous work in this series was reported in Part I (Izv. vyssh.uch.zav., Radiofizika, 3, 367, 1960). Depth of modulation measurements were carried out with the apparatus described in the above paper. One measuring point was in the immediate neighbourhood of the transmitter; the remaining points were located roughly along the longitudinal circle and were at a distance of 400 (I), 800 (II) and 1400 (III) km, respectively. In each case the carrier was modulated at 40, 80, 160 and 600 cps. At point I the original 80% modulation was found in most cases to decrease to 78-67%. The change in the modulation at 40 cps was less than at 600 cps. The changes were

Card 1/4

On the distortion of the ...

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very different on different days. At point II there was both a decrease and an increase in the depth of modulation; the increase occurred at practically all the frequencies for about 30% of all cases. At point III an increase in the modulation was quite frequently found at 80, 160 and 600 cps, while at 40 cps there was considerable demodulation (up to 45%). No clear relationship between the demodulation and the power of the transmitter was detected. A further series of experiments was concerned with demodulation at $\lambda = 2000$ m. The average values of the relative change in the modulation were as follows:

	Power, %	Point I				Point 2			
		F=40, cps	F=80, cps	F=160, cps	F=600, cps	F=40, cps	F=80, cps	F=160, cps	F=600, cps
Average	100	16.6	13.7	11.3	-2.3	17.0	13.7	10.5	18.9
$\Delta M/M$	50	18.1	13.8	2.1	-1.9	23.9	15.5	16.0	21.9

Measurements were also made along a meridional route at 140 km (point 1) and 230 km (point 2) and the average results obtained were as follows:

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On the distortion of the ...;

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E032/E514

Point 1								
F=40, cps	1	F=80, cps	2	3	4	5	F=160, cps	F=600, cps
Average $\Delta M/M$	18.3	15.0	14.7	13.6	12.5	8.5	9.9	7.5
Point 2								
F=40, cps	1	F=80, cps	2	3	4	5	F=160, cps	F=600, cps
Average $\Delta M/M$	12.8	9.6	9.2	8.2	8.1	8.0	6.5	7.5

The five results for 80 cps modulation frequency refer to successive 3 min averages. These measurements were carried out after sunset during the summer months. They were then repeated under winter conditions (December, 1960) and the results were:

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E032/E514

Power, %		Point 1			
		F=40, cps	F=80, cps	F=160, cps	F=600, cps
Average	100	19.3	15.7	9.3	5.9
$\Delta M/M$	50	15.6	9.9	3.4	2.4
Point 2					
Average	100	14.8	10.4	6.5	3.2
$\Delta M/M$	50	10.9	8.7	5.7	2.7
Point 3					
Average	100	10.5	8.9	6.5	0.9
$\Delta M/M$	50	10.0	5.2	4.6	0.5

Comparison of these results with the predictions of the theory of nonlinear phenomena shows that there is good general agreement between them. There are 8 figures and 4 tables.

ASSOCIATION: Novosibirskiy elektrotekhnicheskiy institut svyazi
Card 4/4 (Novosibirsk Elektrotechnical Institute of
Communications)
SUBMITTED: July 4, 1961

VILENSKIY, I.M.

Radio wave interaction in the ionosphere. Izv. vys. ucheb. zav; radio-
fiz. 5 no.3:468-472 '62. (MIRA 15:7)

1. Novosibirskiy elektrotekhnicheskiy institut svyazi.
(Radio waves) (Ionosphere)

L 43940-66 EWT(d)/EWT(1)/EEC(k)-2/FCC RB/GW/WS-2

ACC NR: AP6026928

SOURCE CODE: UR/0141/66/009/004/0649/0656

AUTHOR: Vilenskiy, I. M.

ORG: none

TITLE: Nonlinear distortion of high-power radio waves propagating in the ionosphere
(Experimental investigation). Part 3

SOURCE: IVUZ. Radiofizika, v. 9, no. 4, 1966, 649-656

TOPIC TAGS: radio wave propagation, ~~radio~~ wave propagation, ionospheric propagation

ABSTRACT: The results of three series of tests are reported. The first series (October-November 1960) included a transmission of 1300-m long radio waves modulated by 60, 80, 160, and 600 cps for a distance of 300 km. The second series (December 1962) was devoted to studying the effect of transmitter power on demodulation and field strength; transmission distances were 160 and 600 km. The third series (summer 1963) involved 80, 160, and 400-cps modulated transmissions for 160, 300, and 600 km. Detailed experimental data is tabulated. These conclusions are reported: (1) The nonlinear modulation distortion may reach 20-30%; the experiments made it possible to evaluate some parameters of the lower ionosphere and revealed an appreciable variation of the electron temperature under the influence of propagating radio waves; the modulation distortion caused by the ionosphere nonlinearity is of little practical significance because, apparently, the interference distortion plays a much

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UDC: 621.371.3

2 00100-06

ACC NR: AP6026928

larger role in the practical range of audio frequencies and transmission distances; (2) A nonlinear relation between the square of the field strength of ionosphere-reflected waves and the transmitter power was established experimentally, although the experiments should be considered as preliminary; (3) In further experimental studies of nonlinear distortion of radio waves in the ionosphere, special attention should be paid to the route selection; for example, no longer route than 500 or 600 km is desirable and the terrain should not be rugged. "The author wishes to thank S. I. Volosnikov, V. A. Kochergin, B. I. Podlipalin, L. N. Ruchkan, L. I. Semenov, and V. P. Khoroshilov who took part in the preparation and carrying out of measurements." Orig. art. has: 5 figures, 4 formulas, and 7 tables. [03]

SUB CODE: 17, 20 / SUBM DATE: 28Oct65 / ORIG REF: 004 / OTH REF: 001/ ATD PRESS: 506/

hs

Card 2/2

L 19808-65

ACCESSION NR: AP5000522

indicative of the presence of discontinuities and a horizontal component of the ionospheric movement. Orig. art. has: 7 formulas, 2 tables and 4 figures.

ASSOCIATION: Novosibirskiy elektrotekhnicheskiy institut svyazi (Novosibirsk
Electrotechnical Institute of Communications)

SUBMITTED: 16Mar64

ENCL: 00

SUB CODE: ES, EC

NO REF SOV: 000

OTHER: 000

Card 2/2

USSR/Pharmacology. Toxicology. Local Anesthetics

V

Abs Jour : Ref Zhur - Biol., No II, 1958, No 51979

Author : Blyumin, I.Sh., Vilenskiy, I.T.

Inst : -

Title : Therapy of Extensive Burns

Orig Pub : Eksperim. Khirurgiya, 1956, No 2, 35-43

Abstract : The therapeutic properties of a mixture consisting of Belenko serum, novocaine and penicillin (I) was investigated in 43 dogs with third degree burns. The observations demonstrated that intravenous administration of I in the form of a 0.5 percent solution in doses of 3 ml/kg had a favorable effect, by extending the period of elevated blood pressure and prolonging the life of the animals during the phase of excitation only. The administration of I during the inhibition phase aggravated the course of the process. I prevented the development of the burn shock. The mixture was administered within 1 1/2 hours after the burn and was given again within 24, 48, 72, and 96 hours. The effectiveness of the

Card : 1/2

USSR/Pharmacology. Toxicology. Local Anesthetics

V

Abs Jour : Ref Zhur - Biol., No II, 1958, No 51979

considered mixture proved sufficiently high in burn shock
and acute toxemia. -- A.A. Myazdrikova.

Card : 2/2

BLYUMIN, I.Sh.; VILENSKIY, I.T. (Kuybyshev)

Potentiated anesthesia and hypothermia in the treatment of traumatic
shock. Eksper. khir. 4 no.6:46-48 N-D '59. (MIRA 14:6)
(ANESTHESIA) (HYPOTHERMIA) (SHOCK)

VILENSKIY, I.T.

Potentiated anesthesia and artificial hypothermia during surgery in
severe shock; experimental study. Vest. khir. 85 no. 7:91-98 Je '60.
(MIRA 14:1)

(SHOCK) (HYPOTHERMIA)

BLYUMIN, I.Sh., VILENSKIY, I.T.

Treatment of extensive burns; experimental investigation [with summary
in English]. Eksper.khir. 1 no.2:35-43 Mr-Apr '56 (MIRA 11:10)

1. Iz eksperimental'noy laboratorii Privolzhskogo okruzhnogo voyennogo
gospitalya.

(BURNS, experimental
ther. (Rus))

VIENENIY, K. K.

USSR/Radio

Communications
Bibliography

Jan/Feb 1948

"Review of P. N. Ramlan's Textbook 'Radio Engineering', K. M. Vilenksiy, Eng., 5 pp

"Radiotekhn" Vol III, No 1

Critical reviewer states that it is impossible to list all the errors and discrepancies appearing in the textbook. That the figures in the book are drawn carelessly, which in themselves lead to erroneous conception of the various circuits and systems. Nevertheless, according to Vilenksiy, this book has

been approved by the Administration for the Training Schools of the Ministry of Communications as textbook for higher technical schools of railroad transport. Submitted 10 Aug 1947

FDB

647104

VILENSKIY, Khatskel' Moiseyevich [Vilens'kyi, Kh.M.], kand. tekhn.
nauk; FAL'KOVICH, Saveliy Yerezeyevich [Fal'kovych, S.IA.],
doktor tekhn. nauk; KOVAL'CHUK, O.V., inzh., red.izd-va;
VOLKOV, V.M., kand. tekhn. nauk, retsenzent

[Reception of centimeter waves] Pryimannia santymetrovykh
khvyl'. Kyiv, Tekhnika, 1964. 291 p. (MIRA 17:11)

1. 38161-65
AM5004017

SEC-2/ENT(a)/PSS-2/SEC-4/ENC(t)/ESD-2
BOOK EXPLOITATION

Pn-4/Pp-4/Pac-4/Pj-4
UR/ 2.1

Vilenskiy, Khatskel' Moiseyevich (Candidate of Technical Sciences);
Fal'kovich, Savelly Yereyevich (Doctor of Technical Sciences)

Reception of centimeter waves . Druzhnaya santymetrovkh krov' Kiev,
Vyd-vo "Tekhnika", 1964. 0292 p. illus., biblio. 100 copies
printed.

TOPIC TAGS: centimeter wave receiver, travelling wave tube, SHF
amplifier, negative feedback, tunnel diode amplifier, parametric
amplifier, maser, klystron, backward wave tube, receiver noise
reduction

PURPOSE AND COVERAGE: This book is intended for engineers, scien-
tific workers, and students in advanced radio engineering courses
in schools of higher education. The book deals with the theory,
computation, and design of receiving equipment for centimeter
radio waves. Methods of obtaining high sensitivity by reducing
random noise in the equipment and the design and construction of
vhf receivers are emphasized. Chapters I, III, and IV, with the
exception of section 21, were written by S. Ya. Fal'kovich;

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Chapters II, V, VI, VII, and section 21 of Chapter IV were written
by Kh. M. Vilens'kiy.

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SUB CODE: EC SUBMITTED: 08Jul64 NR REF SOV: 042

OTHER: 014

Card 5/5

PROCESSES AND PROPERTIES OF IRON																									
COMMON ELEMENTS													RARE ELEMENTS												
IRON													STEEL												
<p>Urobilinemia. L. I. Vilenski and M. H. Peskov. <i>Kosov. Med. Zhur.</i> 31, 334-42 (1935); <i>Chem. Zentr.</i> 1937, I, 376.—Urobilinemia can be interpreted as a symptom of functional insufficiency of the heart and liver and can be detected by the detn. of urobilin in the blood. In serious infections, especially pneumonia, there is a marked accumulation of urobilin in the blood, while the substance is absent in slight infections. While the bile of healthy individuals contains no urobilin, in pathological conditions of the liver it is secreted into the bile and into the blood. Thus in 75% of the cases of cholecystitis urobilin is present in the bile; the same is true in acute rheumatism. M. G. Moore</p>																									
<p>ASM-3LA METALLURGICAL LITERATURE CLASSIFICATION</p>																									

The secretion of sweat. I. I. Vilenskiy, *Klin. Med.*
U. S. S. R., 10, 1440-51 (1968); *Chem. Zentr.*, 1930, II,
677. - A no. of patients were exposed at 35-40° to the dia-
phoretic action of a light bath for 15-30 min. The alkali
reserve, total N, glutathione and Cl were detd. in the
blood and in the perspiration while Cl content and pH
were detd. in the urine, all detns. being made both before
and after the light bath. In addn. the quantity of per-
spiration secreted from 300 sq. cm. of body surface and
the body temp. were detd. Conclusion: Under the
influence of the higher temp. considerable amts. of Cl and
residual N are excreted with the perspiration and the
buffer and reduction-oxidation systems of the blood are
affected.
M. G. Moore

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L.I. Vilenskii. Ivanovo, 1944. 186 p.

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2633 Serdecho-Legochaya nedostatochnost' pri netuberkuleznykh zadolevaniyaku legkikh.
Trudy fak terapevt. Kliniki (Ivan Gos. Med. In-T), vyp. 3, 1949, s. 4-18

30: LETOPIS' NO. 35, 1949

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[Mechanization and automation in the machinery industry] Mekhanizatsiya i avtomatizatsiya v stankostroenii. Khar'kov, Khar'kovskoe obl.izd-vo, 1958. 119 p. (MIRA 13:2)

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(Machinery industry--Technological innovations)
(Automation)

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(Riga)

Temporary incapacity in coronary insufficiency. Sov.med. 22
no.2:15-21 P '58. (MIRA 11:4)

(CORONARY DISEASE
length of invalidism)
(DISABILITY EVALUATION, in various dis.
coronary insuf., length of invalidism)

~~VILANSKIY, L.I., prof. (Riga)~~

~~S.S. Zimnitskii; on the 30th anniversary of his death. Terap. arkh.~~
~~30 no. 1: 78-80 Ja '58. (MIRA 11:3)~~
~~(ZIMNITSKII, SEMEN SEMENOVICH, 1873-1927)~~

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(Electrification)

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[Your enemy Teller] Vash vrug Teller. Moskva, Polit-
izdat, 64. 68 p. (MIRA 17:6)

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Problems in the distribution of electric power plants. Vop. ekon.
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(Electric power plants)

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(Electrification)

VILENSKIY, M.

Electrification of the country and distribution of productive forces
during the expanding building of communism. Vop. ekon. no.10:3-14
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(Electrification)

VILENSKIY, M.

Soviet electric capacity in the light of tasks of the new plan.
Vop.ekon. no.10:58-70 0 '58. (MIRA 11:11)
(Electric power)

30(5), 25(5), 8(0)

SOV/29-58-12-1/21

AUTHOR:

Vilenskiy, M., Candidate of Economic Sciences

TITLE:

At equal Investments - Economy of Time (Pri odinakovykh kapitalovlozheniyakh - vyigrysh vremeni)

PERIODICAL:

Tekhnika molodezhi, 1958. Nr 12, pp 1-5 (USSR,

ABSTRACT:

In this article, the author reports on the planning of electrification. For the next 15 years the Party has placed in front as a chief task to catch up with the USA in respect of economy. An accelerated development of basic industries is, however, impossible without a simultaneous extension of power economy. To solve the problems set up, the production of electric energy must be increased to 800-900 billion kW/h within extremely short terms. Comrade N. S. Khrushchev said in a speech made at a meeting of the building contractors of the Volga Hydroelectric Power Station (GES) imeni V. I. Lenin that the erection of some GES's should be dropped in favor of the erection of heat-engine generating stations (TES). The building of GES's is by 2-2.5 times on an average, for smaller power stations even by 3-4 times, more expensive than the erection of TES. On the other hand, the current generated by

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At Equal Investments - Economy of Time

004/20-96-12-1/23

GES is much cheaper. In recent years, however, it has been observed that, by reason of technical progress and the use of cheap coal, gas and petroleum, the cost of production for current has been greatly reduced, while for GES it has remained unchanged. An increase of total capacity of the TES with simultaneous increase of capacity for individual aggregates leads to a reduction of specific investments for the erection of these power stations. In recent years huge coal deposits have been discovered in Siberia. There, the coal is won by open working which greatly reduces its price. Such coal deposits are: Itatskoye and Tom'-Usinskoye in West Siberia, Nazarovskoye and Irsha-Borodinskoye in the

Krasnoyarskiy Kray, Abanskoye and Azeyskoye in the Irkutskaya Oblast' and Ekibastuzskoye in Kazakhstan. Even more economical is the burning of mazout and gas. According to approximate estimates, the cost of heating for a gas-operated power station will be about 2-10 times lower than for power stations operating with coal (depending on the quality of coal). Favorable economic indices of high-power and superpower TEs operating with such fuels bring them near to GES with regard to economy. TEs in the European part of the USSR even produce a more expensive

Card 2/3

At Equal Investments - Economy of Time

SOV/29-58-12-1/23

current than TES operating with natural gas. The principal trend of the general plan does by no means imply that the erection of water-power plants should be completely renounced. But one will take a more economic standpoint in the future building GES that require the least investments per unit and generate a cheaper current. In the next years, the construction of 30 heat-engine generating stations is provided. In some parts of the country, such giant power stations are already under construction: Nazarovskaya in Krasnoyarskiy kray Tom'-Usinskaya in Kemerovskaya oblast; Troitskaya and Verkhne-Tagil'skaya in the Ural, Zmiyevskaya in the Ukraine and Pribaltiyskaya in Estoniya. 17 high-power heat-engine generating stations to be operated with natural gas are being built. Their total capacity will be 11.4 million kw. There are 2 figures.

Card 3/3

VILENSKIY, M.

"The electric power industry of the U.S.S.R. and its distribution"
by N.M. Oznobin. Reviewed by M. Vilenskii. Vop. ekon. no.9:113-
116 S '62. (MIRA 15:9)
(Electric power plants) (Industries, Location of)
(Oznobin, N.M.)

VILENSKIY, M.

Role of power resources in the development of production forces.
Vop. ekon. no.2:21-29 F '62. (MIRA 15:1)
(Electrification)